MEMORANDUM

Date: November 27, 2017

From: Wilmington Environmental Restoration Committee (WERC)

To: Jim DiLorenzo/EPA, Garry Waldeck/DEP

Re: WERC Comments on:
Draft OU3 DAPL Focused Feasibility Study
Olin Chemical Superfund Site - Wilmington, MA

WERC has completed a review of the Draft OU3 DAPL Feasibility Study dated October 2017. Like many previous documents for the site, numerous statements are made in the report that are not supported by data or any technical analysis. WERC's comments focus on the larger issues for the site. It should not be construed that WERC agrees with statements in the document if not directly commented on.

Comments

1. Overall:

   a. As WERC commented in the OU3 DAPL RI report, it is not clear how "DAPL" is defined. Is the DAPL defined by specific conductance or by the presence of ammonia, chloride magnesium, sodium, sulfate above their respective threshold values in the equation or is it above a specific gravity of 1.025?

   b. The DAPL has also migrated into and through the bedrock fractures. The report title implies that it will address all OU3 DAPL, but it does not address "DAPL" in bedrock fractures. Again, the title should be revised and be clear it is not addressing all OU3 "DAPL".

2. Page 2-1 Remedial Action Objectives (RAOs): The report states*: The RAOs are identified below.*

   a. Reduce, to the extent practicable, mobility or volume of DAPL constituents in the DAPL pools that present a source of long-term impacts to groundwater

   b. Prevent ingestion of DAPL by OU3 groundwater receptors.

   These RAOs fail to recognize the value of the aquifer for private and public water supply and DEP designation. A more appropriate RAO would be:

   a. Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.

3. Page 2-2 through 2-4 Applicable or Relevant and Appropriate Requirements (ARARS). After a lengthy generic discussion on ARARs, the report states: *Chemical-specific ARARs and development of PRGs for groundwater will be presented in the OU3 Groundwater*

FS. Chemical specific ARARs and PRGs should be developed for all chemicals of concern contained in the DAPL.

4. Page 2-4 Development of Preliminary Remediation Goals. Again, Olin fails to provide specific PRGs for the DAPL. The report states*: This source control FFS for DAPL is not based on achieving chemical specific concentrations for individual dissolved constituents in DAPL rather it is based on preventing exposure to DAPL, removing or isolating DAPL from the environment or otherwise mitigating potential for transfer of dissolved constituents in the DAPL pools to groundwater. As such there are no concentration based PRGs for DAPL. For technologies that rely on the removal of DAPL, the remediation goal will be attaining a condition whereby the aqueous material is no longer DAPL by the established definition of DAPL.* A PRG needs to be developed. Again, since Olin has not presented how the DAPL is defined (specific conductance, specific gravity or threshold concentrations of constituents). If Olin is using specific conductance, then a PRG needs to be proposed using specific conductance.

5. Page 2-5 The volume of the DAPL pool under MMB (GW-83D) is ignored. The specific conductance for the well is 34,200 umhos/cm much greater than the criteria of 20,600 umhos/cm used to define "DAPL".

6. Page 2-8 On-property DAPL pool: WERC reiterates our position that the containment area does not isolate the groundwater, migration occurs through bedrock fractures. The DAPL within the containment area needs to be removed.

7. Page 4-6 DAPL Extraction. Olin appears to use only 1 extraction well for each DAPL pool. As noted in earlier comments, multiple wells could be installed. Olin indicated that the zone of influence for a well pumping 2.0 gpm is 100 ft. Olin should further evaluate the use of multiple wells and still retain gravity flow. A simple groundwater model can be developed for each pool, and the flow velocities examined for different well extraction spacing and withdrawals rates.